

*The National Academies of*  
**SCIENCES • ENGINEERING • MEDICINE**

HEALTH AND MEDICINE DIVISION  
BOARD ON HEALTH SCIENCES POLICY

Proposal No. 10004799

**Forum on Medical and Public Health Preparedness for Disasters and Emergencies**  
**Disaster Research Response Action Collaborative**

NOVEMBER 2019

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This proposal is submitted by the NATIONAL ACADEMY OF SCIENCES (NAS), which assumes full technical and legal responsibility under its Act of Incorporation for the work to be carried out under any resultant agreement. The NAS is a private Federally chartered corporation exempt from federal income tax under Internal Revenue Service Code section 501(c)(3). The NAS Taxpayer Identification Number is 53-0196932. DUNS Number is 04-196-4057. **Awards resulting from this proposal should be issued to NATIONAL ACADEMY OF SCIENCES and payment directed to:**

**National Academy of Sciences**  
Accounting Office  
ATTN: Cash Management Section  
500 Fifth Street, NW  
Washington, DC 20001  
Telephone: 202-334-3351 or 202-334-1476

(rev. 7/7/15)

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November 6, 2019

RE: NAS Proposal No. 10004799

William M. Yates, Contracting Office  
USEPA/ORD/NHSRC/TCAD  
26 West Martin Luther King Drive  
Mail Code: NG16  
Cincinnati, OH 45268

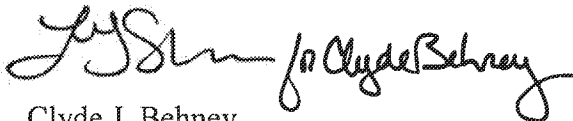
Dear Mr. Yates:

We are pleased to submit the enclosed proposal, prepared by our Board on Health Sciences Policy, requesting support of the Forum on Medical and Public Health Preparedness for Disasters and Emergencies, and the Action Collaborative on Disaster Response Research. The total estimated cost of this project is \$615,051 from November 1, 2019 to October 31, 2020. We are requesting support from the Environmental Protection Agency in the amount of \$10,000.

The responsible staff officer for this study is Scott Wollek, Senior Program Officer. He may be contacted at 202-334-1562 regarding program matters. Business negotiations are the responsibility of Robert "Skip" Day, Contract Manager, Office of Contracts and Grants. He may be reached at 202-334-3873.

We appreciate your consideration of this matter.

Sincerely,



Clyde J. Behney  
*Executive Director*  
Health and Medicine Division

Enclosures

cc: Glennis Reslock  
Sarah Taft  
Erin Silvestri

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HEALTH AND MEDICINE DIVISION  
*Board on Health Sciences Policy*

Proposal No. 10004799

**Forum on Medical and Public Health Preparedness for Disasters and Emergencies  
Action Collaborative on Disaster Research**

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**ATTACHMENTS:**      Curriculum Vitae for Andrew M. Pope, Ph.D.  
                                Curriculum Vitae for Scott Wollek, M.P.A.

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## **Forum on Medical and Public Health Preparedness for Disasters and Emergencies**

### **A. Summary**

The National Academies of Sciences, Engineering, and Medicine, Health and Medicine Division requests that the Environmental Protection Agency support the activities of the Forum on Medical and Public Health Preparedness for Disasters and Emergencies (the "Forum"), specifically the Action Collaborative on Disaster Research (the "Action Collaborative"). Recognizing the need to bring together the diverse set of stakeholders involved in the medical and public health preparedness and response, the National Academies established the Forum in 2007 to engage leaders from across governmental, non-governmental, and private sectors (i.e. , federal agencies, private foundations, the academic community, state and local public health authorities, and professional associations). Through its meetings and public workshops, the Forum provides a venue where its members, other leaders from the public health and health care preparedness communities, and members of the public can have candid discussions about issues of mutual interest. The Forum convenes as a group up to three times a year and organizes and hosts up to two public workshops a year. Since its inception, the Forum has undertaken a broad set of initiatives across a spectrum of public health and medical issues. In addition to member meetings and workshops, Forum activities have included engaging its members in strategic planning sessions, conducting regional meetings to address challenges and best practices associated with responding to emerging infectious diseases, and implementing crisis standards of care in the aftermath of disasters and other emergencies. The Forum has conducted public workshops on a range of topics that include medical surge capacity, mass casualty response to incidents in rural settings, response issues after an improvised nuclear device attack, enabling rapid and sustainable public health research during disasters, engaging the public in critical disaster planning and decision making, and a workshop series addressing the challenges and barriers associated with the distribution and dispensing of medical countermeasures.

### **B. Background**

#### *Policy Context*

There are many governmental agencies and private organizations charged with ensuring the Nation's capacity to prevent and respond to the health effects that arise from disasters, both man-made and natural. While each of these stakeholders is critical in guaranteeing adequate prevention and response, their efforts must be coordinated to ensure optimal outcomes. However, the challenge arises from the diverse set of responsibilities of the primary stakeholders, the Department of Health and Human Service (HHS) and the Department of Homeland Security (DHS), and coordinating the efforts among the many other governmental agencies (federal, state, and local), industry, professional societies, foundations, academia, and other interested parties. Unfortunately, venues that bring all of these stakeholders together are limited. The Forum began to address these issues in 2007.

Aligning the responsibilities and focus of each stakeholder will greatly assist in ensuring

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adequate protection and response. Each stakeholder offers unique assets that must be linked in to an overall strategy. It is here where the appropriate federal agencies, including the HHS, DHS, Department of Defense, Department of Transportation, and Veterans Affairs, play a vital role in developing a National strategy and logistical support and coordinating with the private sector. The Forum provides a venue where the major stakeholders may sit down together and discuss the primary issues, afford organizations the opportunity to make assessments, discuss policies, and review outcomes. These areas will focus not only on the immediate responses to disasters and public health emergencies, but also the intermediate and long term needs that arise (e.g. providing adequate shelter, food and water safety, primary care, mental health) during the recovery phase and efforts to enhance preparedness, cooperation and information sharing.

The activities of the federal government, volunteer organizations, the private sector, and others in the medical preparedness, resilience, and health sciences are of increasing complexity, both in terms of technology and policy. Currently, it is difficult for the nation's medical emergency response and public and mental health systems to meet the physical and psychological needs that result from all types of disasters including terrorism and natural disasters. Unfortunately, gaps continue to exist in the following areas: (1) Global Health Security, (2) Communication and Coordination, (3) Personal and Community Resilience, and (4) Critical Infrastructure Protection.

Addressing the physical, psychological, and social needs that result from various acts of terrorist events or natural disasters will therefore require universal preparedness by all systems responsible for the public's health. Preparedness, response, and recovery are required for all hazards and should include all segments of the population during each phase of the event. The research and development needs of these initiatives are immense and thus require the federal government to seek and coordinate assessment from both national and international clinical practice, as well as biomedical research communities. Such coordination will require the best advice available as federal agencies seek guidance in developing its strategic plans for advancing the practice of medical preparedness. These initiatives include scientific, technical, and workforce issues in the medical and public health arenas (infrastructure, clinical, environmental, and public health, research needs, including the development of new drugs and biologics and the collection and funding of critical data collection in a timely manner); effective training, education, and communication exercises; and evaluation of preparedness. The multiple and complex ethical issues surrounding these developing fields must also be considered.

### *Technical Context*

#### *Disaster Research Response Action Collaborative*

The Forum will continue to convene an Action Collaborative on Disaster Research, based on the receipt of supporting funds from EPA and other sponsors to: 1) foster improved processes and platforms for developing and implementing needed time-critical data collection and research in response to disasters (“Science Preparedness”); 2) identify evidence-based mechanisms and opportunities for conducting and sharing information gathered from public health research during disasters; 3) engage cross-sector stakeholders in development, refinement, and promotion of disaster research opportunities and best practices; 4) provide a venue to support the

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development and maintenance of a rapid response mechanism for the National Academies to continue to meet sponsor needs for convening, idea generation and information sharing during the initial stages of a public health emergency.

Activities of the Action Collaborative may include: 1) outlining and defining processes for conducting research (particularly research involving human subjects and at-risk populations) quickly following a disaster to avoid missing critical data; 2) ensuring community engagement and IRB/ethical considerations in disaster research. 3) defining processes for expanding and enhancing a coordinated network of disaster researchers; 3) assembling data collection, research, and best practice resources; 4) exploring appropriate venues to support the development and maintenance of a rapid response mechanisms for the National Academies and other platforms or forums to continue to meet sponsor needs for convening, generating ideas, and sharing information during the initial, as well as later stages of a public health emergency.

### **C. Plan of Action**

#### *Statement of Task*

The National Academies of Sciences, Engineering, and Medicine's Health and Medicine Division (HMD) established a Forum on Medical Preparedness for Disasters and Emergencies (the "Forum") in 2007. HMD forums are designed to provide its members with a venue for exchanging information and presenting individual views, and allow a structured opportunity for dialogue and discussion while scrutinizing critical and possibly contentious scientific and policy issues. Representatives from government, industry, academia, and other interested parties are expected to serve on the Forum, which will convene up to 3 times a year to confer on subject areas of mutual interest and concern.

As an extension of the work of the Forum, The Academies has convened the Action Collaborative to serve as an informal venue for discussions and efforts to advance the disaster research enterprise by public, private, and non-profit organizations.

#### *Expertise*

The Action Collaborative will include members, chosen for their professional expertise in developing, conducting, and promoting disaster-related research as well as their general scientific and/or disaster medicine/public health/emergency management credentials. Expertise may include grant management (e.g., as a Principal Investigator), emergency management, homeland security, environmental health and geosciences, toxicology, behavioral/psychosocial/mental health, data science/ bioinformatics, health care, public health, public policy, risk communications, health disparities and community engagement, and human subjects research/bioethics.

#### *Work Plan*

1. **In-Person Meetings:** Action Collaborative Meetings will be held up to two times a year.

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Action Collaboratives engage stakeholders with similar interests and responsibilities in cooperative activities that analyze in-depth high-priority issues, advance identified goals, and make progress on recommendations from previous National Academies consensus reports. Collaboratives are participant-driven, action-oriented activities that foster collaboration and information sharing among members and external thought leaders and stakeholders.

2. **Conference Calls:** The Action Collaborative will convene conference calls up to six times per year to continue discussions and collaborative efforts of the members between meetings.
3. **Workshop:** The National Academies will convene a public workshop to explore the state of the disaster science enterprise and opportunities for future development. The workshop will be open to the public and will provide a venue for presentations, panels and discussions to explore the topic in depth. A proceedings of the workshop written by a designated rapporteur will be published following the workshop.

Deliverables specific to the Action Collaborative will include:

- Electronic Quarterly Progress reports

### **D. Product and Dissemination Plan**

The discussions of the Forum and the resulting collaborative activities among Forum members will be the primary products of the Forum. A Meeting Recap document will also be produced following each meeting. The public workshops will further inform the discussions and understanding of issues by providing an opportunity to draw upon a wider group of additional experts and interested parties than would normally be present at forum meetings. Workshop summaries or commissioned papers may be prepared and distributed, but will not contain recommendations.

### **E. Federal Advisory Committee Act (FACA)**

Section 15 of the Federal Advisory Committee Act, 5 U.S.C. App. § 15, does not apply to the activities described in this proposal. Section 15 of FACA restricts agency use of any advice or recommendations provided by the Academy that were developed by use of an Academy committee under an agreement with a Federal agency unless certain requirements are met. Those requirements do not apply to the work described in this proposal because the work does not involve either the use of an Academy committee or the provision of any advice or recommendations to a Federal agency.

### **F. Public Information about the Project**

In order to afford the public greater knowledge of Academy activities and an opportunity to provide comments on those activities, the Academy may post on its website (<http://www.national-academies.org>) the following information as appropriate under its

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procedures: (1) notices of meetings open to the public; (2) brief descriptions of projects; (3) committee appointments, if any (including biographies of committee members); (4) report information; and (5) any other pertinent information.

### **G. Experience and Qualifications**

#### *Organizational Experience*

The National Academy of Sciences (NAS) was established by an Act of Congress and signed by President Lincoln in March 1863 to “investigate, examine, experiment, and report upon any subject of science or art....whenever called upon by any department of the Government.” The National Research Council was established by executive order under President Wilson in 1916, expanding the operational capacity of the National Academy of Sciences. The National Academy of Sciences, National Academy of Engineering, and National Academy of Medicine work together as the National Academies of Sciences, Engineering, and Medicine to provide independent, objective analysis and advice to the nation and conduct other activities to solve complex problems and inform public policy decisions. The National Academies also encourage education and research, recognize outstanding contributions to knowledge, and increase public understanding in matters of science, engineering, and medicine.

One central purpose of the National Academies is to advise the government on issues of science, medicine, and technology. The National Academies and its affiliated organizations are private, independent, nonprofit institutions that jointly possess a unique status as congressionally chartered advisers to the government. Every year many studies are requested of the National Academies. In addition to federal sources, requests for studies are also received from foundations and other private sector organizations. A small number of studies receive internal support.

The National Academies have a long tradition of providing policy advice from a national perspective. This tradition rests on the ability of the institution to convene committees of experts who are charged to deliberate important issues of health and health care policy in an objective and independent environment that assures rigorous analysis. It can serve an important function by bringing representatives from diverse groups together to achieve consensus on complex issues.

#### *Personnel*

Project staff will report to the director of the Board on Health Sciences Policy. The staff includes a senior program officer to serve as forum director, an associate program officer, a research associate, a senior program assistant, a financial associate, and a program coordinator. Curricula Vitae for Andrew M. Pope, Director, Board on Health Sciences Policy and Scott Wollek, Director, Forum on Medical and Public Health Preparedness for Disasters and Emergencies, are attached.



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## *Facilities and Equipment*

The meeting facilities of the NASEM Health and Medical Division are available to the constituent organizations of the Academy complex. These include the National Academy of Sciences Main Building, 2101 Constitution Avenue, N.W., Washington, D.C.; the Keck Center, 500 Fifth Street, N.W. Washington, D.C.; The Arnold and Mabel Beckman Center in Irvine, California; and the J. Erik Jonsson Woods Hole Center in Woods Hole, Massachusetts. These facilities are used to conduct hundreds of committee meetings each year. Thus, the National Academy of Sciences will provide facilities and equipment required for the proposed project, for both committee members and staff.

## **Sponsorship:**

For the Action Collaborative on Disaster Response Research we are requesting \$10,000 from the Environmental Protection Agency for the period November 1, 2019 to October 31, 2020.

As this is an ongoing multi-sponsor funded activity, for all deliverables outlined in this proposal to be completed, it is necessary that all funding be received in full from the entire complement of sponsors within the period of performance. If all funding is not received, then some deliverables will be commensurately reduced. If this is the case, all sponsors will be informed of the changes to the deliverables.

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HEALTH AND MEDICINE DIVISION  
BOARD ON HEALTH SCIENCES POLICY

Proposal No. 10004799

Disaster Research Response Action Collaborative

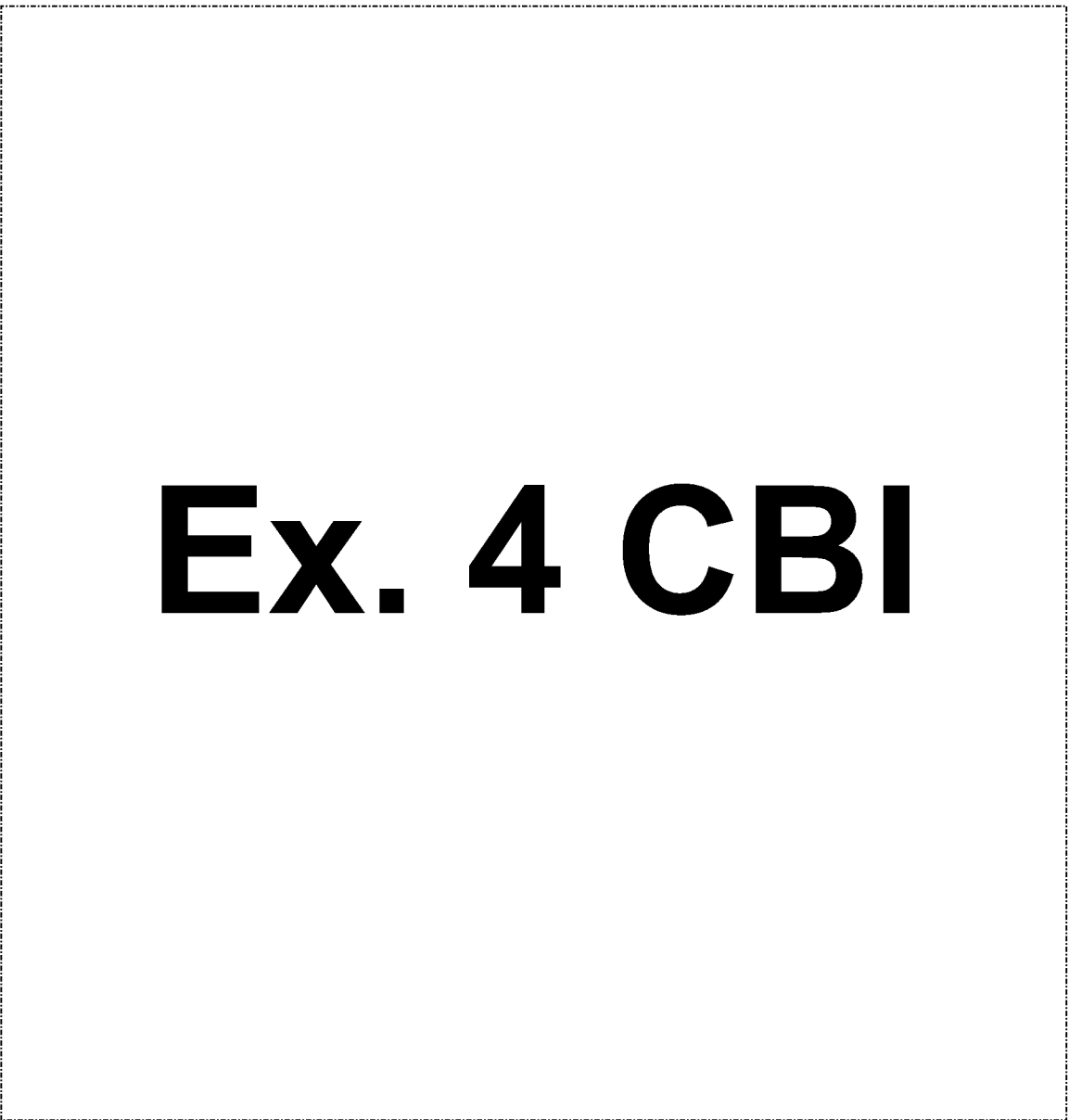
EPA Cumulative Summary Estimate of Costs

11/1/19 to 10/31/20

Direct Labor  
Overhead  
    Overhead Cost of Money  
Travel  
Reports  
Technology/Communication  
Meeting Expense  
Other Direct Costs

General and Administrative Costs  
    G&A Cost of Money

Amount Requested from EPA



Footnote: These major cost categories reflect the billing structure used by the National Academy of Sciences. Cost and rate data are attached as background information. Please be advised, however, that all costs are systematically collected in our accounting system and are available for audit through arrangements with the Defense Contract Audit Agency and our cognizant Administrative Contracting Officer at the Office of Naval Research.

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HEALTH AND MEDICINE DIVISION

BOARD ON HEALTH SCIENCES POLICY

Proposal No. 10004799

Disaster Research Response Action Collaborative

Estimate of Costs

11/1/19 to 10/31/20

12 months

DIRECT LABOR, ON-SITE		Percent of Time	Annual Salary	Total Salary	Project Totals	EPA Request
EXEMPT						
Andy Pope	Sr. Board Director					
Scott Wollek	Sr. Program Officer					
TBD	Associate Program officer					
Mari Shelton	Research Associate					
Bardia Massoudkhan	Financial Business Partner					
TBD	DECO					
TOTAL EXEMPT						
NON-EXEMPT						
Bridget Avila	Administrative Assistant					
Kim Sutton	Sr. Program Assistant					
TOTAL NON-EXEMPT						
Total Salaries						
Salary Adjustments (see Footnote 1)						
Total Direct Labor, On-Site						
Fringe Benefits @						
TOTAL DIRECT LABOR, ON-SITE, PLUS FRINGE						
SUBTOTAL (On-site Overhead Base)						
OVERHEAD, On-site						
COST OF MONEY (Labor)						
TOTAL OVERHEAD, On-Site (see Footnote 1)						
OTHER DIRECT COSTS						
Other Personnel						
	Facilitator					
	Science Writer					
	Copy Editor					
Total Other Personnel						
Travel Expenses (Domestic)						

Ex. 4 CBI

	#Pers.	#Mtg	Days/ Mtg	#Per X Mtg.	Mtg Cost	\$/Mtg	Subtotal							
Experts	<div>Ex. 4 CBI</div>													
Invitees														
Adjustment for working meals provided (see Footnote 4)														
Total Domestic Travel														
Total Travel														
Other Costs														
Reports (see Footnote 4)														
Master Manuscript														
Report Prod.														
Total Reports														
Commissioned Papers														
Photocopies (see Footnote 5)														
Postage and Delivery														
Project														
Technology/Communications														
Conference Calls														
Technology Services (see footnote 6)														
Office supplies														
Meeting Expenses														
Working meals/Coffee Service														
Transcription														
Offsite Meeting Room Charges														
Offsite Computer/AV Charges														
Transportation														
Other														
Total Meeting Expenses														
Books and Periodicals (e.g., newsletters, interline)														
Total Other														
TOTAL OTHER DIRECT COSTS														
SUBTOTAL														
General & Administrative Costs														
23.93														
Cost of Money														
0.5548														
TOTAL GENERAL AND ADMINISTRATIVE COSTS (see footnote 7)														
TOTAL ESTIMATED COST														
Amount Requested from EPA														

It is requested that the award will provide for payment via Letter of Credit or electronic transfer.

# Ex. 4 CBI

Federal Negotiated Indirect Cost Rate Agmt - 12/26/17			
NAS FY 19 FIXED RATES		Rate Before Cost of Money	Cost of Money Additive Total Rate
Offsite Overhead		<div>Ex. 4 CBI</div>	
Regular Overhead			
Flow-through Admin			
G&A			
Leave			
Fringe			
<b>PRICES</b>			
Prices are determined on an actual-cost basis, but are not included in the Negotiation Agreement with ONR.			
Copy Center		<div>Ex. 4 CBI</div>	
Technology Services, bi-weekly			
Pay Periods			
		<div>Ex. 4 CBI</div>	